



APPENDIX III  
MARKED-UP VERSION OF REPLACEMENT PARAGRAPHS IN THE  
SPECIFICATION PURSUANT TO 37 C.F.R. § 1.21 (b)(1)(iii)

(Replacement "ABSTRACT" for page 21, lines 1-6)

[Textured Seal for Reduced Wear]

The present invention [describes a contact surface of a seal] relates to seals having textured features. The present invention particularly relates to seals having contact surfaces with said features wherein the contact surface seals properly and is resistant to wear. The contact surface is able to perform in very severe environments, such as those found in earthmoving applications.

(Replacement paragraph for page 10, lines 11-21)

In the preferred embodiment of the present invention, the plurality of protrusions are formed interior to the outer peripheral edge of a seal ring which is biased against a sealing surface. The placement of the circumferentially located protrusions adjacent but interior to the outer peripheral edge is preferable because these protrusions provide a point of intensified contact that redirects the incoming dirt and debris particles out of the contact band and into the low pressure areas. This washes away the abrasive particles and prevents them from accumulating in the contact band. Since the particles do not accumulate in the contact band, the wear is significantly reduced. In an exemplar track seal, the contact band (at the nominal face load of 500 pounds) is 1.6 millimeters. [For example, in a D10 track seal the contact band at the nominal face load of 500 pounds is 1.6 millimeters.] The innermost part of the textured features is 1.2 millimeters from the edge of the seal lip.

(Replacement paragraph for page 10, lines 22-30 and page 11, lines 1-4)

In some cases, the placement of the textured features inside the contact band may require that the size of the textured features be customized to suit the nature of the seal. For example,

while not intended to limit the scope of the present invention, for seals that have a small contact band, the corresponding textured features should be smaller. If the smallest textured feature possible (*i.e.*, according to the limits of manufacturability) is still too big for the contact band, the textured features may be placed partly within the contact band. Ideally, spacing between textured features should follow the size of the patterns. While the present invention is not intended to be limited by a precise mechanism, it is believed that the textured features of the seal break up dirt particles and disperse[s] clumps of dirt that will roll up into the contact band. To maintain their effectiveness in this function, the textured features should be smaller than the distance traveled by the fronts of entering dirt. [For a D10 track seal, for example] In an exemplar track seal, it was found that this distance should be between 2 and 5 millimeters.